

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1(Original): A method for detecting a kallikrein 8 polypeptide associated with ovarian cancer in a patient comprising:

- (a) obtaining a sample from a patient;
- (b) detecting in the sample kallikrein 8 polypeptide; and
- (c) comparing the detected amounts with amounts detected for a standard.

2(Original): A method for diagnosing and monitoring ovarian cancer in a subject comprising detecting in a sample from the subject a kallikrein 8 polypeptide.

3(Original): A method of detecting ovarian cancer in a patient, the method comprising comparing:

- (a) levels of a kallikrein 8 polypeptide in a sample from the patient; and
- (b) normal levels of expression of kallikrein 8 polypeptide in a control

sample,

wherein a significant difference in the levels of kallikrein 8 polypeptides, relative to the corresponding normal levels, is indicative of ovarian cancer.

4(Original): A method for monitoring the progression of ovarian cancer in a patient, the method comprising:

- (a) detecting in a sample from the patient at a first time point, a kallikrein 8 polypeptide;

- (b) repeating step (a) at a subsequent point in time; and
- (c) comparing levels detected in steps (a) and (b), and thereby monitoring the progression of ovarian cancer.

5(Original): A method for determining in a patient whether ovarian cancer has metastasized or is likely to metastasize in the future, the method comprising comparing

- (a) levels of a kallikrein 8 polypeptide in a patient sample; and
- (b) normal levels or non-metastatic levels of a kallikrein 8 polypeptide, in a control sample wherein a significant difference between levels of expression in the patient sample and the normal levels or non-metastatic levels is an indication that the ovarian cancer has metastasized.

6(Currently Amended): A method for assessing the aggressiveness of indolence of ovarian cancer comprising comparing:

- (a) levels of expression of a kallikrein 8 polypeptide in a patient sample and
- (b) normal levels of expression of the kallikrein 8 polypeptide, in a control sample, wherein a significant difference between the levels in the patient sample and normal levels is an indication ~~indication~~ that the cancer is aggressive or indolent.

Claims 7-9(Canceled)

10(Original): A method of assessing the efficacy of a therapy for inhibiting ovarian cancer in a patient, the method comprising comparing:

- (a) levels of a kallikrein 8 polypeptide in a first sample obtained from the patient, and
- (b) levels of the kallikrein 8 polypeptide in a second sample obtained from the patient following therapy,

wherein a significant difference in the levels of expression of the kallikrein 8 polypeptide in the second sample relative to the first sample, in an indication that the therapy is efficacious for inhibiting ovarian cancer in the patient.

Claims 11-13(Canceled).

14(Previously Presented): A method of claim 1 wherein the patient sample comprises serum obtained from the patient.

15(Previously Presented): A method of claim 1 wherein the kallikrein 8 polypeptide is detected using antibodies that bind to a kallikrein 8 polypeptide or part thereof.

16(Currently Amended): A method of claim 15 wherein the ~~antibodies~~ antibodies are used in an immunoassay.

17(Original): A method as claimed in claim 1 which further comprises detecting one or more of human stratum corneum chymotryptic enzyme (HSCCE), kallikrein 2, kallikrein 4, kallikrein 5, kallikrein 6, kallikrein 9, kallikrein 10, kallikrein 11, CA125, CA15-3, CA72-4, CA19-9, OVX1, lysophosphatidic acid (LPA), creatin-kinase BB, haptoglobin alpha, prostatic acid phosphatase, osteopontin, and carcinoembryonic antigen (CEA).

18(Original): A method for screening a subject for ovarian cancer comprising:

(a) incubating a biological sample from the subject with a first antibody specific for hK8 which is directly or indirectly labeled with a detectable substance, and a second antibody specific for hK8 which is immobilized;

(b) separating the first antibody from the second antibody to provide a first antibody phase and a second antibody phase;

- (c) detecting the detectable substance in the first or second antibody phase thereby quantitating hK8 in the biological sample; and
- (d) comparing the quantitated hK8 with levels for a predetermined standard.

19(Original): An in vivo method for imaging ovarian cancer comprising: (a) injecting a patient with an agent that binds to a kallikrein 8 polypeptide, the agent carrying a label for imaging the ovarian cancer; (b) allowing the agent to incubate in vivo and bind to a kallikrein 8 polypeptide associated with the ovarian cancer; and (c) detecting the presence of the label localized to the ovarian cancer.

20(Original): A method as claimed in claim 19 wherein the agent is an antibody which recognizes a kallikrein 8 polypeptide.

21(Previously Presented): A method as claimed in claim 19 wherein the label is a radiolabel, fluorescent label, nuclear magnetic resonance active label, positron emitting isotope detectable by a positron emission tomography ("PET") scanner, chemiluminescer, or enzymatic marker.

22(Previously Presented): A kit for carrying out a method as claimed in claim 19.

23(Original): A kit for assessing whether a patient is afflicted with ovarian cancer, the kit comprising reagents that specifically bind with kallikrein 8 polypeptides.

Claim 24(Canceled).

25(Previously Presented): A kit as claimed in claim 23 wherein the reagents are antibodies that specifically bind with protein or protein fragments corresponding to a

kallikrein 8 polypeptide.

Claim 26(Canceled).

27(Currently Amended): A method in an electronic system and/or in a network for ~~determining~~ determining whether a subject has ovarian cancer or a pre-disposition to ovarian cancer associated with a kallikrein 8 polypeptide comprising

- (a) determining the presence or absence of a kallikrein 8 polypeptide, and
- (b) based on the presence or absence of the kallikrein 8 polypeptide, ~~determining~~ determining whether the subject has ovarian cancer or a pre-disposition to ovarian cancer, and
- (c) optionally recommending treatment for the ovarian cancer or pre-ovarian cancer condition.

Claims 28-29(Canceled).